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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/708,129	11/07/2000	David N. Spiegel	END920000101US1	1094

45092	7590	04/07/2005	EXAMINER

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ART UNIT	PAPER NUMBER
2192	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

		Application No.	Applicant(s)
Office Action Summary		09/708,129	SPIEGEL, DAVID N.
		Examiner	Art Unit	
		J. Derek Rutten	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

· A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>02 February 2005</u>.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Acknowledgement is made of Applicant's amendment dated 2/2/2005, responding to the

12/2/2004 Office action provided in the rejection of claims 1-18, wherein claims 1, 9, 17, and 18

have been amended, no claims have been canceled, and no new claims have been added. Claims

1-18 remain pending in the application and have been fully considered by the examiner.

2.   Numerous arguments were presented by the applicant, particularly that the Stupek

reference failed to teach adding prerequisites and corequisites to a list, and failed to teach a

Service Link database application. These arguments are convincing, therefore, the rejection is

withdrawn. Further arguments will be addressed below.

3.   Applicant's previous amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Response to Arguments

4.   In the last paragraph on page 10 through the top of page 11 of the response, the applicant

essentially argues that Stupek fails to disclose a database of known second maintenance items,

since items in Stupek are "limited to data regarding each upgrade package," in contrast to the

items of the present application which are part of the database whether they are "included in a

particular upgrade or not." It is noted that these features are not recited in the rejected claims.

Although the claims are interpreted in light of the specification, limitations from the specification

are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir.

1993).

5.   In the last paragraph on page 10 of the response, the applicant argues that "the Office

then removes all meaning from the word 'known'" and provides a quotation from the previous

Office Action as support for the argument. However, the basis for this argument is unclear. The

applicant does not specifically address the quotation from the previous Office Action, but simply

makes the allegation without an explanation. The word "known" in this case is used as an

adjective meaning "proved or generally recognized" (American Heritage Dictionary of the

English Language, Fourth Edition). In computer science, any data available to a software

program can be interpreted as being "known," since the program can access and manipulate the

generally recognized data. To the contrary, unknown data cannot be manipulated since there is

no way to access unrecognized data. In the present case, Stupek assembles maintenance items

into a database for access and manipulation by the upgrade process which recognizes the data as

maintenance items. If these items were unknown, then Stupek's upgrade process would be

unable to recognize them. If the applicant does not believe Stupek's maintenance items to be

"known", then a clear technical explanation should be provided describing how the language of

the claim is distinguished from Stupek. Furthermore, the applicant is invited to provide a

definition of the word "known" in order to facilitate a proper interpretation of the claim.

6.   In the second paragraph on page 11 through the top of page 13, the applicant essentially

argues that Stupek does not teach searching the database for items matching prerequisites and

corequisites. The applicant appears to argue that Stupek's initial searching is done to match a

resource with an upgrade, does not search specifically for items matching prerequisites and

corequisites, and "does not search for dependencies at all." This argument is not convincing.

The search for dependencies is inherent in the process of the automatic upgrade as described by

Stupek column 7 lines 29-35:

> Therefore, the dependency information in the Package database 25 describes not only the
> dependencies between packages on the CD, but also all dependencies between an upgrade package
> and any upgrade not available on the CD. Even though the unavailable upgrades cannot be
> automatically installed with the available upgrades, the user is nonetheless aware of their
> necessity.

A search for these items must be carried out, otherwise they could not be automatically installed.

7.   In the last paragraph on page 13 through the top of page 14, the applicant essentially

argues that Stupek does not disclose an order list of items not already received, and then

ordering, receiving, and applying the items on the order list. However, column 4 lines 11-34

generally describes a process of determining if any available upgrades have been already been

applied. If an update is found that has not already been received, it is added to the resource

database which is used to compile a job. Column 5 lines 41-45 describes a process of grouping

upgrade packages into a job. This is interpreted to be the step of adding packages not already

received to an order list. Further, column 7 lines 6-15 describes automatic installation in the

context of package dependencies. This provides for receiving and applying the items on the

order list.

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

9.   Claims 1, 3-9, and 11-18 rejected under 35 U.S.C. 103(a) as being unpatentable over

prior art of record U.S. Patent No. 5,960,189 to Stupek et al. (hereinafter "Stupek") in view of

U.S. Patent 5,721,824 to Taylor (hereinafter "Taylor").

         As per claim 1, Stupek discloses:

         A method of maintaining software on a computer system (See Abstract)

comprising the steps of: .

         Bringing up first and second host sessions on a computer system (FIG. 1 elements

1 and 2);

         Starting in said first host session, a software recording application having data

on existing first maintenance items that have been previously applied to said computer

system (figure 1 reference 5 "Management Information Base", column 3 lines 22-30, "A

management information base (MIB) within the server

maintains basic descriptive information about each of the

resources **available** on the server." Resources that are currently

available and exist on the server, inherently must have been previously applied, otherwise

they would not be available.);

Starting in said second host session, a database application having a database of

known second maintenance items including prerequisite items and corequisite items

corresponding to each of said known second maintenance items (figure 1 reference 9

"Upgrade Database", column 3 lines 44-column 7 lines 8-10, "The database also

contains information regarding the dependencies between the

package and other upgrade objects or packages..." Maintenance

items must inherently be known if information regarding them is stored in a database. As

a database is a collection of knowledge, it would not exist without knowledge of its

members.);

Activating a maintenance application on said computer system (figure 1 reference

11 "Upgrade Advisor");

Entering a first list of new third maintenance items in said maintenance

application (figure 1 reference 7 "Resource Upgrades", column 3 lines 31-43,

"**Upgrades** to the network resources are provided to a server

manager by a distribution medium (not shown), such as a CD-

ROM. The upgrades 7 may also be provided by an on-line

service (not shown), such as a bulletin board service

administered by a manufacturer of network resources." Upgrades

inherently provide a new version of a product, otherwise they might be called a

"downgrade", or "rollback". Also see column 3 line 57 – column 4 line 5.);

Searching said database of known second maintenance items for records

matching each of said new third maintenance items that have said prerequisite items and

corequisite items, (column 4 lines 20-27: "The upgrade advisor then

retrieves upgrade information from the upgrade database and

performs two types of comparisons: a) whether or not a

particular upgrade package corresponds to a resource on the

server, and b) whether or not the version number of the

upgrade package matches the version number of the

corresponding network resource (i.e, whether or not the

upgrade package represents a true upgrade for the existing

network resource) ."; also column 7 lines 6-35, especially lines 29-33:

"Therefore, the dependency information in the Package

database 25 describes not only the dependencies between

packages on the CD, but also all dependencies between an

upgrade package and any upgrade not available on the CD.";

also column 4 lines 6-9: "When the analysis is complete, the upgrade

advisor 11 presents a report and/or graphical display to

the user. This output is in the form of upgrade

recommendations, each supported by an explanation of the

reasons for upgrade." <u>Comment:</u> The first list is analyzed by the upgrade

advisor and modified according to the current maintenance needs, producing a report, or

list, of prerequisites and corequisites.);

Thereafter determining from said software recording application which items on

said first list have already been received, and adding those items not received to an order

list (column 4 lines 20-27 as cited above describes the determination of items that have

already been received; also column 4 lines 45-48: "When the upgrade advisor

11 and/or the user have **selected 100 the network resources**

3 that need to be upgraded, an upgrade installer 17

oversees the automatic installation of the packages to the

server." <u>Comment:</u> A determination of which items have already been received is

inherent in the selection of "network resources that need to be upgraded". If a resource

does not need to be upgraded, then it must have already been received. Selection of

resources is impossible without determination. Also column 5 lines 41-45: "In the

server upgrader 22, several upgrade packages 7 and the

corresponding installation instructions 20 are **grouped 108**

into a "job" 18. Within each job 18, the installation

instructions for every package are included in a control

file 18a." <u>Comment:</u> Grouping packages into a job is considered adding to an order

list.)*; and*

Ordering, receiving, and applying said items on said order list (column 4 lines

45-48 as cited above in addition to column 4 lines 48-53: "At the outset, the

appropriate upgrade packages 7 are **retrieved** 102 from the distribution medium (or the on-line service) and **supplied** 106 to a server upgrader 22 located in the upgrade installer 17. Installation instructions 20 are retrieved 104 from the database 9 and are supplied 106 to the server upgrader 22."; also column 5 lines 48-63, "When the job is ready to be installed to the target server, the server upgrader connects with the server…and then sends the job…to a staging area. The staging area may…be anywhere else in the network capable of handling the deposit and retrieval of upgrade files….the agent executes the instructions in the control file…").

Stupek column 4 lines 6-9 discloses presenting a list of upgrades to a user: When the analysis is complete, the upgrade advisor 11 presents a report and/or graphical display to the user. Stupek takes an original list of available upgrades and analyses it to determine the set of necessary upgrades. A list is then generated to display the results of the analysis. Stupek further describes automatic installation of the displayed list using a Package database that describes any dependencies related to the package in column 7 lines 6-15: To enable automatic installation of the package, the database contains the package script 25g (the installation instructions for the package). The database also contains

information regarding the dependencies between the package

and other upgrade objects or packages: child dependencies

25h are the upgrade objects associated with a package;

sibling dependencies 25j are the packages upon which a

package depends; and parent dependencies 25i are the

packages or upgrade objects which together constitute a

larger package. However, Stupek does not expressly disclose "adding said

corresponding prerequisite items and corequisite items to said first list." However, in an

analogous environment, Taylor teaches adding dependency information to a list in

column 2 lines 20-23: "If the dominant package has a dependent

package not already installed, the method constructs a

trailer script process and an action list. The action list

has action entries identifying dependent packages not

previously installed." It would have been obvious to one of ordinary skill in

the art at the time the invention was made to use Taylor's teaching of adding dependency

packages to a list with Stupek's first list. One of ordinary skill would have been

motivated to install a multi-package distribution pack with package dependencies on a

target system in a single installation operation (Taylor column 1 lines 58-60).

      As per claim 3, the above rejection of claim 1 is incorporated. Stupek further

discloses the use of an operating system with the computer system (column 1 line 17).

As per claim 4, the above rejection of claim 3 is incorporated. Stupek further discloses the use of a network with the computer system (column 1 line 13).

As per claim 5, the above rejection of claim 1 is incorporated. Stupek further discloses the practice of keeping track of what software has been installed or uninstalled (column 6 lines 45-47).

As per claim 7, the above rejection of claim 1 is incorporated. Stupek further discloses the practice of storing information relating to program updates in a file (column 6 lines 43-45).

As per claim 8, the above rejection of claim 1 is incorporated. Stupek further discloses the practice of updating software on the computer system (column 5 lines 48-63).

As per claim 9, Stupek discloses:

A system for maintaining software on a computer system (FIG. 1) *comprising:*

a maintenance application having a first list of third maintenance items wherein the first list comprises a list of maintenance items needed to be applied to said computer system (figure 1 reference 11 "Upgrade Advisor"; figure 1 reference 7 "Resource Upgrades", column 3 lines 31-43, "Upgrades to the network resources are provided to a server manager by a distribution medium..";

also column 3 line 57 – column 4 line 7: "When the upgrades 7 become

available to the network (e.g., by inserting the CD-ROM

into the server manager drive, or by logging into the on-

line service), an upgrade advisor 11 in the upgrade device

10 automatically analyzes each network resource 3 currently

on the server 1 to determine the availability and **necessity**

of the corresponding upgrade 7. When the analysis is

complete, **the upgrade advisor 11 presents a report** and/or

graphical display to the user.");

All other limitations have been addressed in the above rejection of claim 1.

As per claims 11-13, 15 and 16, the above rejection of claim 9 is incorporated.
All further limitations have been addressed in the above rejections of claims 3-5, 7, and 8,
respectively.

As per claim 17, all limitations have been addressed in the above rejections of
claims 1 and 9.

As per claim 18, Stupek discloses a computer program product (column 3 lines
31-33). Stupek further discloses a computer readable medium and program instruction
means (column 11 line 9 – column 14 line 33). All further limitations have been
addressed in the above rejection of claim 1.

10.   Claims 2 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stupek et

al as applied to claims 1 and 9, respectively, above, and further in view of "Y2K Compliance and

the Distributed Enterprise" by Gowan et al.

        As per claim 2, Stupek does not expressly disclose software maintenance on a

mainframe.

        However, in an analogous environment, Gowan et al. teaches the benefits of

upgrading a mainframe computer system (page 68, paragraph 1).

        It would have been obvious to one of ordinary skill in the art at the time the

invention was made to use Stupek's software maintenance system with Gowan's concept

of upgrading a mainframe computer in order to facilitate a swift and automated upgrade

process. This is desirable since mainframe computers serve a large number of users, and

having a swift and automated upgrade process ensures the availability of correct and

efficient software.

As per claim 10, all further limitations have been addressed in the above rejection of claim 2.

11.   Claims 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stupek

and Taylor as applied above to the rejections of claims 1 and 9, further in view of "IMS/ESA

Sysplex Data Sharing: An Implementation Case Study" by Boyle et al. (hereinafter "Boyle").

As per claim 6, the above rejection of claim 1 is incorporated. Stupek further

discloses the use of a database application through the use of the "server database"

(column 4 lines 14-16). Stupek does not expressly disclose the use of IBM ServiceLink.

However, in an analogous environment, Boyle teaches that ServiceLink can be used in

software maintenance (top of page 32). It would have been obvious to one of ordinary

skill in the art at the time the invention was made to use Boyle's teaching of ServiceLink

with Stupek's database. One of ordinary skill would have been motivated to provide

early opportunity to review software maintenance issues (Boyle: 2nd paragraph of page

32).

In regard to claim 14, the above rejection of claim 9 is incorporated. All further

limitations have been addressed in the above rejection of claim 6.

Conclusion

12.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure. USPN 5835777 to Staelin teaches software updates via searching dependencies and

generation of a dependency list.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to J. Derek Rutten whose telephone number is (571) 272-3703. The

examiner can normally be reached on T-F 6:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JDR

TUAN DAM
SUPERVISORY PATENT EXAMINER